

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

stands these concerns, is well aware of Board's limited jurisdiction, and is aware United States Patent and Trademark Office mandate to decide the registrability of without undue delay. See, generally, of Final Rulemaking, *supra*, and comments and responses published in the notice. Trademark Rules 2.121(a)(1) and (c) were recently amended to state that the Board, denying a motion to extend, may leave as set, to deal with the "concern that, if long periods had to be reset to provide amount of time which was remaining at time a motion to extend was filed, a party could file a motion for extension as a strategy to obtain delay until the Board decides the motion, even if the motion is ultimately denied." *Id.* at 48091.

Here, we see no reason to change the as set in the September 5, 2000 trial or petitioner was on notice of the provisions rule which states that the Board, if it denies a motion for extension, may leave dates originally set. Petitioner, without explanation, waited until the last day of its testimony to request an extension. Such conduct, the reasons given for the extension itself, not warrant a resetting of petitioner's testimony period. Consequently, petitioner's testimony period has expired.

Dismissal of a proceeding is appropriate under Trademark Rule 2.132(a) where the party's time for taking testimony has expired and the plaintiff has not taken any testimony or offered any evidence. See *Hewlett-Packard Co. v. Olympus Corp.*, 931 F.2d 18 USPQ2d 1710 (Fed. Cir. 1991). By order, we have determined that petitioner is entitled to an extension of its testimony. A review of the record shows that petitioner failed to take any testimony or offer other evidence in support of its claims during its assigned testimony period. Accordingly, respondent's cross motion to dismiss is DENIED.

A petition for cancellation is dismissed in prejudice pursuant to Trademark Rule (a).

### **Vulcan Engineering Co. v. FATA Aluminium Inc.**

U.S. Court of Appeals  
Federal Circuit  
Nos. 00-1533, -1553  
Decided February 5, 2002

#### **PATENTS**

[1] **Patentability/Validity — Obviousness — Relevant prior art — Particular inventions** (§ 115.0903.03)

**Patentability/Validity — Obviousness — Secondary considerations generally** (§ 115.0907)

Federal district court did not err in ruling that invention of patent directed to on-line continuous system for metal casting using "lost foam" process is not invalid for obviousness, since "turntable" system cited against patent was dismantled as inoperable shortly after it was built, was not on sale or publicly known or used, and thus was not prior art to claimed system, since invention enjoyed commercial success, and since record shows contemporaneous recognition of achievements of claimed system.

[2] **Infringement — Literal infringement** (§ 120.05)

**Patent construction — Claims — Means** (§ 125.1307)

Federal district court properly concluded that accused system meets "registration" means limitation in claim directed to on-line continuous system for metal casting using "lost foam" process, since plaintiff presented evidence that one of ordinary skill would consider registration means employed by accused system to be interchangeable with that claimed in patent, and known interchangeability is important factor in determining equivalence, and since function of registering or locating mold flask on gondola is identically performed in accused system; defendants cannot avoid infringement holding by asserting that claimed means performs additional function that accused system is not capable of performing, since it is irrelevant to infringement determination whether claim element has capabilities in addition to that stated in claim.

[3] **Infringement — Literal infringement** (§ 120.05)

**Patent construction — Claims — Means** (§ 125.1307)

Defendants accused of infringing means-plus-function limitation of claim directed to on-line continuous system for metal casting using "lost foam" process cannot avoid finding of infringement by asserting that their system includes features not possessed by claimed device, since use of additional features does not avoid infringement if all of claimed features are present in accused system.

#### **REMEDIES**

[4] **Monetary — Damages — Patents — Lost profits** (§ 510.0507.05)

Patentee seeking damages for price erosion must show that, but for infringement, it would have been able to charge and receive higher price; patentee need not prove that it knew, at time of its bid, that competing bid was for infringing product, but it must establish amount of price reduction, and that price was reduced in response to competing bid.

#### **PATENTS**

[5] **Infringement — Defenses — License** (§ 120.1102)

#### **REMEDIES**

**Monetary — Damages — Patents — Lost profits** (§ 510.0507.05)

Infringement plaintiff's license agreement with third party precludes award of lost profits for defendants' sales of infringing production lines to third party, even though plaintiff reserved right to damages for "failing to obtain the business of supplying" production lines to third party, since plaintiff's grant of express license to third party to have production lines made by defendants is not consistent with assertion of damages against defendants for infringement by those same production lines.

## PATENTS

#### [6] Infringement — Willful (§ 120.16)

## **REMEDIES**

## **Monetary — Damages — Patents — Increased damages (§ 510.0507.07)**

Federal district court did not err in concluding that defendants did not willfully infringe patent in suit, or abuse its discretion by declining to award enhanced damages, even though defendants did not show that they obtained legal advice before submitting infringing offer to third party, since defendants acted promptly upon receiving notice of possible infringement, at time when its bid had been accepted but no other infringing activity was shown.

## **Particular patents — General and mechanical — Metal casting system**

4,736,787, McMellon, lost foam handling system, judgment that patent is infringed and invalid affirmed.

**Appeal from the U.S. District Court for the  
Eastern District of Michigan. Cohn, S.J.**

Action by Vulcan Engineering Co. against FATA Aluminium Inc. and FATA Group S.p.A. for patent infringement, in which defendants counterclaimed for declaratory judgment of patent invalidity. District court, following bench trial, held patent not invalid, enforceable, and infringed, and awarded damages. Both parties appealed. Affirmed with modification of damages award, and remanded for accounting of modified damages; Michel, J., dissenting in part in separate opinion.

J. Ross Forman III, of Burr & Forman, Birmingham, Ala., for plaintiff/cross-appellant.

Thomas N. Young, Marshall G. MacFarlane, and Amanda Conti-Dunhaime, of Young & Basile, Troy, Mich.; William R. Bueser and Diane M. Buettner, of Bueser, Bueser, Black, Lynch, Fryhoff & Graham, Bloomfield Hills, Mich., for defendants-appellants.

Before Newman, Michel, and Lourie, circuit judges.

Newman, J.

Vulcan Engineering Company brought suit for infringement of United States Patent No. 4,736,787 ("the '787 patent") against FATA Aluminium, Inc., and FATA Group, S.p.A. (collectively "Fata"). Fata raised various defenses, and filed a counterclaim charging that the '787 patent is invalid. The United States District Court for the Eastern District of Michigan held, after a bench trial, that the '787 patent was valid, enforceable, and infringed, and awarded damages of \$2,187,199.<sup>1</sup> Both sides appeal aspects of the judgment. The judgment is affirmed, with modification of the damages award. We remand for accounting of modified damages.

## *BACKGROUND*

The '787 patent, issued on April 12, 1988, relates to an on-line continuous system for the production of cast metal shapes using the "lost foam" process. The traditional method of casting of metal articles involves four general steps: (1) forming a mold by compacting the mold material around a model in the shape of the desired article; (2) cutting the mold open to remove the model and then resealing the mold; (3) pouring molten metal into the mold and allowing it to cool; and (4) breaking or cutting the mold to recover the cast metal article. Lost foam casting, first described in 1958, was a significant advance in that step (2) is entirely eliminated. Instead, a polystyrene foam model of the desired article is used to form the mold, and is not removed from the mold; then when molten metal is poured into the mold, the polystyrene foam is burnt out as the metal replaces the foam model.

Lost foam casting was practiced before the '787 invention, but the process was not automated and the steps were labor-intensive and entailed high production costs. It was believed that continuous automated procedures were not suitable, and none was available until Vulcan's development of the process that is the subject of the '787 patent. It is illustrated in patent Figure 1, which shows, *inter alia*, interconnected gondolas 19 moving through stations that perform the steps of loading and compaction 12, pouring of the molten metal 13, and mold unloading 14.

<sup>1</sup> *Vulcan Engineering Co. v. Fata Aluminum, Inc.* No. 98-74495 (E.D. Mich. Aug. 10, 1999) (validity and infringement); (Oct. 22, 1999) (denying new trial); (Aug. 1, 2000) (accounting).

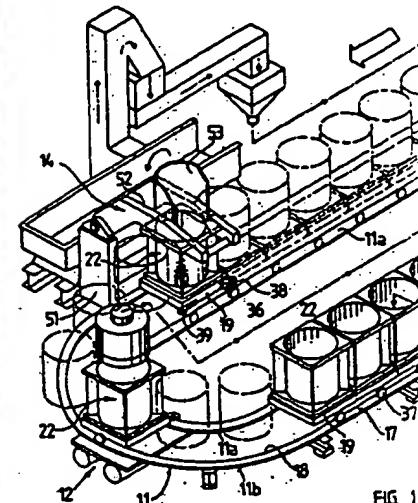


FIG. 1

**Claim 1 is the broadest claim:**

1. In a lost foam casting system, a curvilinear track means having a load and compaction station, a metal prep station and a mold unloading system:

a plurality of flask carrying gondolas supported for movement along the means with each gondola including a means for registering said flask thereon for movement in said compaction station, and each of said gondolas being pivotally connected to each adjacent gondola;

drive means for effecting internal movement of the mold carriers between said positions along said track means

and a plurality of mold forming adapted for registry in said gondola detachably supported thereon.

The Vulcan system was reported with a  
in trade publications.

In February 1997 Vulcan and Fata submitted competing bids in response to a solicitation by General Motors Corporation for metal casting lines by the lost foam method meeting certain detailed specifications. The bid was lower, and General Motors awarded the contract to Fata. Vulcan then withdrew from General Motors on August 6, 1997, because General Motors believed that a system meet

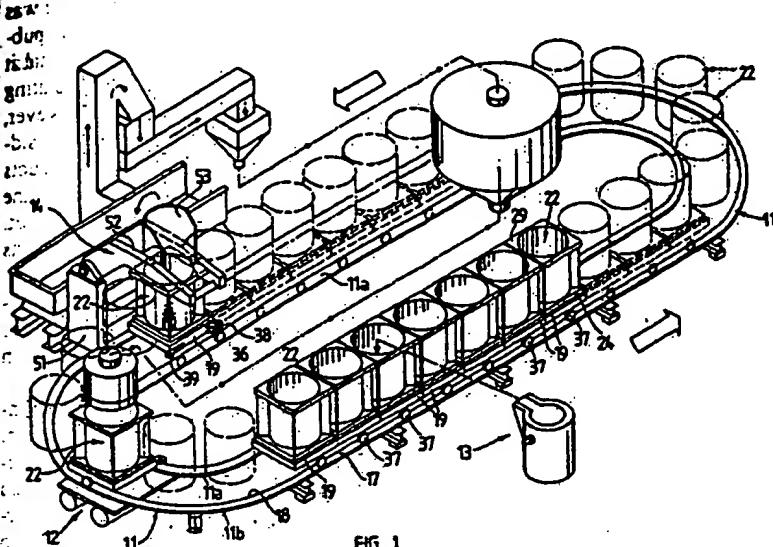


FIG. 1

Claim 1 is the broadest claim:

1. In a lost foam casting system, a closed curvilinear track means having a loading and compaction station, a metal pouring station and a mold unloading system;

a plurality of flask carrying gondolas supported for movement along the track means with each gondola including means for registering said flask thereon for alignment in said compaction station, and with each of said gondolas being pivotally connected to each adjacent gondola;

drive means for effecting intermittent movement of the mold carriers between indexed positions along said track means;

and a plurality of mold forming flasks adapted for registry in said gondolas and detachably supported thereon.

The Vulcan system was reported with acclaim in trade publications.

In February 1997 Vulcan and Fata submitted competing bids in response to a solicitation by General Motors Corporation for nine metal casting lines by the lost foam method, meeting certain detailed specifications. Fata's bid was lower, and General Motors awarded the contract to Fata. Vulcan then wrote to General Motors on August 6, 1997, stating that Vulcan believed that a system meeting the

specifications of the bid would necessarily infringe the '787 patent. On August 12, 1997, General Motors sent Fata a copy of Vulcan's letter, reminding Fata of its contractual indemnification obligation with respect to patent infringement. Fata continued to work on producing the lines for General Motors, and Vulcan filed suit against Fata on September 15, 1998. Line 1 was delivered by Fata to General Motors in November 1998; and lines 2 through 5 were still being produced when in May 1999 the district court announced its decision that the '787 patent was valid and infringed. Following certain license arrangements between Vulcan and General Motors, damages were assessed. Both sides appeal.

## I

### VALIDITY

Fata challenged the validity of the '787 patent on several grounds.

#### *Obviousness*

Invalidity on the ground of obviousness is a question of law based on underlying factual findings. See *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). The district court's findings of fact are reviewed for clear error, and its statements of law and

application of the law to the found facts are reviewed for correctness. *See Glaverbel Societe Anonyme v. Northlake Mktg. & Supply, Inc.*, 45 F.3d 1550, 1555, 33 USPQ2d 1496, 1499 (Fed. Cir. 1995). A factual finding is deemed clearly erroneous when "although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed." *United States v. United States Gypsum Co.*, 333 U.S. 364, 395, 76 USPQ 430, 443 (1948).

The district court, reviewing the evidence, found that the engineering consensus before appearance of the '787 invention was that lost foam processes having all stations on-line can not be operated as a continuously linked system. The metal casting systems cited by Fata to support its contention of obviousness were "accumulating" systems that did not operate continuously, or on-line green sand metal casting systems; no reference showed or suggested how to modify these systems for continuous lost foam casting.

The district court found that there was nothing, suggestion, or reason in the prior art to select aspects of the prior art and combine them in the manner of the '787 system. *See Karsten Mfg. Corp. v. Cleveland Gulf Co.*, 242 F.3d 1376, 1385, 58 USPQ2d 1286, 1293 (Fed. Cir. 2001) ("In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention."); *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998) (a showing of a suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding").

[1] Fata states that the district court erroneously ruled that the turntable system at General Motors' Rochester Products facility was not prior art to the Vulcan system. The Rochester Products system was intended to be a continuous on-line lost foam casting system, wherein a large turntable carried flasks to three operating stations by indexed movement. It was designed by an employee at the Rochester Products facility, built by a company hired for the purpose, and dismantled as operable soon after it was built. The court

found that the Rochester Products system was "secret" and that it was not on sale or publicly known or used, and correctly held that it was not prior art. *See 35 U.S.C. § 102* (stating the statutory sources of prior art). However, exercising prudence, the district court considered the effect that the Rochester Products system would have had on the validity of the '787 patent if it were deemed to be prior art. The court found that the Rochester Products system did not have pivotally-mounted gondolas and did not have a track, and that "nothing in Rochester Products suggests or teaches the invention claimed in the '787 patent or in combination with other cited art."

The district court gave weight to the commercial success of the Vulcan '787 system. *See Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1391, 7 USPQ2d 1222, 1225 (Fed. Cir. 1988) ("The commercial response to an invention is significant to determinations of obviousness, and is entitled to fair weight.") The record shows contemporaneous recognition of the achievements of the Vulcan system, including articles in trade journals and testimony of witnesses concerning the belief in the engineering community that the lost foam process could not be effectively mechanized as a continuous on-line process. Appreciation by contemporaries skilled in the field of the invention is a useful indicator of whether the invention would have been obvious to such persons at the time it was made. *See Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983) ("evidence of secondary considerations may often be the most probative and cogent evidence in the record").

#### Other Grounds

The district court also rejected Fata's claim that the '787 patent is invalid for anticipation, observing that Fata had introduced no single piece of prior art showing, or purporting to show, all elements of the claims. *See Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (an anticipating reference must describe all claimed aspects of the invention). The court also rejected Fata's claim that the '787 patent is invalid for lack of enablement. These rulings have not been appealed. The district court commented on Fata's scatter-shot arguments for invalidity with the observation that this case is "too important . . . for throw-away and truncated arguments."

We do not discern reversible error in the district court's findings and conclusions; we affirm the ruling that the patent is not valid.

#### II

#### INFRINGEMENT

Analysis of patent infringement proceeds in two stages. First, if there is a dispute as to the scope or meaning of a claim or any term thereof, the court will resolve the issue of law. Second, it is determined whether the accused product or system falls within the scope of the claim, a question of fact. *See Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 46 USPQ2d 1169 (Fed. Cir. 1998) (*en banc*).

Claim 1, *supra*, includes several limitations in functional terms, stated in the "means" form authorized by 35 U.S.C. § 112 ¶ 6. The scope of three "means" terms was at issue. (1) the "closed curvilinear track means"; (2) the "means for registering said flask [on the gondola] for alignment"; and (3) "drive means for effecting intermittent movement of the mold carriers between positions along said track means." Fata conceded that these claimed functions were performed in its system, but argued that the responding structures were not equivalent. The district court, comparing the structure described in the '787 patent with the structure of the Fata system, found structural equivalents as to all three functional elements.

Functional terms written in "means" are construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. U.S.C. § 112 ¶ 6. Infringement is found if the claimed function is performed either by the structure described in the patent or by an equivalent of that structure. *Texas Instruments Inc. v. United States Int'l Comm'n*, 805 F.2d 1558, 1562, 231 833, 834-35 (Fed. Cir. 1986). Thus construction of "means" claim terms requires consideration of not only the function, but also the structure by which it is performed. *Chiumenti Concrete Concepts, Inc. v. Cardinal Industries*, 145 F.3d 1303, 1308, 46 USPQ2d 1752 (Fed. Cir. 1998) ("a determination of the corresponding structure is a determination of the meaning of the 'means' term in the claim; the meaning of the 'means' term in the claim construct

found that the Rochester Products system was "secret" and that it was not on sale or publicly known or used, and correctly held that it was not prior art. See 35 U.S.C. § 102 (stating the statutory sources of prior art). However, exercising prudence, the district court considered the effect that the Rochester Products system would have had on the validity of the '787 patent if it were deemed to be prior art. The court found that the Rochester Products system did not have pivotally-mounted gondolas and did not have a track, and that "nothing in Rochester Products suggests or teaches the invention claimed in the '787 patent or in combination with other cited art."

The district court gave weight to the commercial success of the Vulcan '787 system. See *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1391, 7 USPQ2d 1222, 1225 (Fed. Cir. 1988) ("The commercial response to an invention is significant to determinations of obviousness, and is entitled to fair weight.") The record shows contemporaneous recognition of the achievements of the Vulcan system, including articles in trade journals and testimony of witnesses concerning the belief in the engineering community that the lost foam process could not be effectively mechanized as a continuous on-line process. Appreciation by contemporaries skilled in the field of the invention is a useful indicator of whether the invention would have been obvious to such persons at the time it was made. See *Stratoflex, Inc. v. Aerquip Corp.*, 713 F.2d 1530, 1538, 218 USPQ 871, 79 (Fed. Cir. 1983) ("evidence of secondary considerations may often be the most probative and cogent evidence in the record").

#### Other Grounds

The district court also rejected Fata's claim that the '787 patent is invalid for anticipation, serving that Fata had introduced no single piece of prior art showing, or purporting to show, all elements of the claims. See *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, USPQ2d 1913, 1920 (Fed. Cir. 1989) (an anticipating reference must describe all claimed aspects of the invention). The court rejected Fata's claim that the '787 patent is invalid for lack of enablement. These rulings have not been appealed. The district court commented on Fata's scatter-shot arguments of invalidity with the observation that this is "too important . . . for throw-away and isolated arguments."

We do not discern reversible error in the district court's findings and conclusions, and affirm the ruling that the patent is not invalid.

## II

### INFRINGEMENT

Analysis of patent infringement proceeds in two stages. First, if there is a dispute as to the scope or meaning of a claim or any aspect thereof, the court will resolve the issue as a matter of law. Second, it is determined whether the accused product or system is within the scope of the claim, a question of fact. See *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 46 USPQ2d 1169 (Fed. Cir. 1998) (*en banc*).

Claim 1, *supra*, includes several limitations in functional terms, stated in the "means" form authorized by 35 U.S.C. § 112 ¶ 6. The scope of three "means" terms was at issue: (1) the "closed curvilinear track means," (2) the "means for registering said flask thereon [on the gondola] for alignment," and (3) the "drive means for effecting intermittent movement of the mold carriers between indexed positions along said track means." Fata conceded that these claimed functions were performed in its system, but argued that the corresponding structures were not equivalent. The district court, comparing the structures described in the '787 patent with the structures of the Fata system, found structural identity or structural equivalence as to all three functional elements.

Functional terms written in "means" form are "construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112 ¶ 6. Infringement is found literally if the claimed function is performed by either the structure described in the patent or an equivalent of that structure. *Texas Instruments Inc. v. United States Int'l Trade Comm'n*, 805 F.2d 1558, 1562, 231 USPQ 833, 834-35 (Fed. Cir. 1986). Thus construction of "means" claim terms requires review of not only the function, but also the structure by which it is performed. *Chiiminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303, 1308, 46 USPQ2d 1752, 1756 (Fed. Cir. 1998) ("a determination of corresponding structure is a determination of the meaning of the 'means' term in the claim and is thus also a matter of claim construction").

#### 1.

The district court found that the "closed curvilinear track means" provides a closed loop on which the gondolas ride through the operating stations, and that the corresponding structure in the '787 patent is a closed curvilinear pair of rails. Fata's system has a closed loop curvilinear pair of rails on which the gondolas ride. The Fata system also has an inner track to prevent lateral movement of the gondolas. The district court found that the presence of an additional track, having a different purpose and function, does not negate the presence of an identical track for the identical purpose. Fata does not appeal the court's findings with respect to this element.

#### 2.

The "means for registering said flask thereon for alignment" fits the flask to the gondola, thereby bringing the flask into alignment with the compaction station. The district court found that the corresponding structure described in the '787 specification is a receptacle on the gondola and two posts on the flask, wherein the posts fit into the receptacle. Fata's system also has a receptacle and two posts that fit into the receptacle and thereby align the gondola with the compaction station; however, Fata places the receptacle on the flask and the two posts on the gondola. The district court found that these differences are insubstantial, and that the structures are equivalent.

[2] Fata argues that the district court erred in finding these differences to be insubstantial. Fata states that the registration means in the '787 patent consists of an alignment plate on the gondola with cutout holes, whereas in the Fata system there are simply circular holes on the flask. Vulcan presented expert testimony that it does not matter, from a mechanical or engineering standpoint, whether the posts and receptacles are located on the gondola or on the flask, and that anyone of ordinary skill would know to interchange the posts and the receptacles for the posts, to perform the same function of alignment. Known interchangeability is an important factor in determining equivalence. See *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 36, 41 USPQ2d 1865, 1874 (1997). The district court's finding that these structures are equivalent is not clearly erroneous, and is affirmed.

Fata also argues that the district court erred in its construction of the "registration" means because the court did not attribute two functions to the means shown in the patent. Fata states that the '787 registration means serves the dual functions of registering or locating the flask on the gondola and aligning the posts of the flask with the compactor pedestals through which vibration for compaction is transferred. Fata states that in its system both of these functions are not performed by its receptacle and post structure, and that infringement is thereby avoided. Fata does not dispute that the registration function is identically performed in its system. Vulcan responds that the '787 registration means is claimed for the function of aligning the flask on the gondola, and that any additional benefit does not diminish the claimed function.

It is irrelevant whether an element has capabilities in addition to that stated in the claim. When the claimed function is performed in the accused system, by the same or equivalent structure, infringement of that claim element is established. *See Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d at 931, 945, 15 USPQ2d 1321, 1332 (Fed. Cir. 1990) (infringement is not avoided "if a claimed feature performs not only as shown in the patent, but also performs an additional function"). The district court correctly construed the registration means.

Fata also argues that Vulcan redefined its invention for litigation purposes in a manner that conflicts with the patent's prosecution history, pointing to Vulcan's amendment to claim 14 where the text was changed from "each gondola supporting one of said flask in proper cooperative alignment with said operating stations" to "each gondola including means for registering one of said flask in proper cooperative alignment with said operating stations." The reason for the amendment is not clear on the prosecution record. However, it has not been shown that this amendment altered the meaning of claim 14, or changed the meaning of claim 1. The district court's interpretation of claim 1 is consistent with the examiner's interpretation on reexamination that: "The inclusion of means for registering in each gondola for alignment [of] each flask in the compacting (or mold forming) station limits the claimed system to a non-accumulating, on-line casting system." We do not discern conflict between the district court's view

of the '787 invention and the prosecution history.

### 3.

Third, Fata contends that the district court erred in its application of the "drive means" to Fata's drive system. Claim 1 describes the drive means as serving the function of "effecting intermittent movement of the mold carriers between indexed positions along said track means."

The district court made a detailed comparison and analysis of the corresponding structures. The court found that both the '787 system and the Fata system have a drive means that includes a hydraulically driven carriage, called a Geneva movement. The '787 specification shows the drive means as including a latch and stop gripper to engage the gondola, while Fata uses front and back levers to grip and engage the gondola. In addition, the '787 drive shows, and Fata uses, a plurality of limit switches and a programmable controller in the drive means. The court found that the structures shown in the '787 patent and those of the Fata system were the same or equivalent, in that the only difference was Fata's use of a gripper with front and back levers instead of a latch and stop. Fata disputes the conclusion that this difference is insubstantial. At the trial witnesses testified that the two levers combine the basic features of a latch and stop, are interchangeable, and operate in the same way. The district court's finding that this is not a substantial difference is not clearly erroneous, and is affirmed.

[3] Fata states that its drive system has features in addition to those shown in the '787 patent, pointing out that in addition to a shock absorbing stop as shown in the '787 patent, Fata uses an electronic valve that slows the carriage to a controlled stop. Also, Fata states that its gripper permits reversal of the direction of the gondolas, and that Fata also includes another gripper that serves to stabilize the gondolas. The district court correctly pointed out that when all of the claimed features are present in the accused system, the use of additional features does not avoid infringement. *See Northern Telecom*, 908 F.2d at 945, 15 USPQ2d at 1332 ("The addition of features does not avoid infringement, if all the elements of the patent claims have been adopted."); *Texas Instruments*, 805 F.2d at 1568, 231 USPQ at 839 ("As a matter of law,

subsequent improvements do not in themselves preclude a finding of infringement

### 4.

Fata also argues that the district court used excessive scope to the claims, and points to the following statement in the court's opinion as showing this error: "The infringement analysis is based on the scope of the claim issue as a measure of the invention and is confined to the particular mode of use or preferred embodiment described in the specification." We discern no error in the district court's statement of the law. This court has often explained that the claims are construed in light of the specification, and are not limited to a designated "preferred embodiment" unless that embodiment is in fact the entire invention presented by the patentee. *See Cybor Corp. v. Baldwin*, 805 F.2d at 1563, 231 USPQ at 835 ("This court has cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.") When the claims include means-plus-function terms in accordance with § 6, claim scope necessarily is not limited to the preferred embodiments, but includes equivalents thereof. The district court correctly stated, and applied, the law of construction.

### Conclusion

The district court's claim construction is confirmed. On this construction the finding of infringement is not clearly erroneous, as has been discussed in connection with the claim construction, and is affirmed.

### III

### DAMAGES

The district court's determination of the amount of damages is a question of fact. It is reviewed for clear error, while the method used by a district court in reaching that determination is reviewed for an abuse of discretion. *Cybor Corp. v. Baldwin*, 805 F.2d at 1568, 231 USPQ at 839 ("As a matter of law,

The district court announced from the bench on May 21, 1999, that it had de-

the '787 invention and the prosecution history.

3.

Third, Fata contends that the district court erred in its application of the "drive means" of Fata's drive system. Claim 1 describes the means as serving the function of "effecting intermittent movement of the mold tiers between indexed positions along said track means."

The district court made a detailed comparison and analysis of the corresponding structures. The court found that both the '787 system and the Fata system have a drive means which includes a hydraulically driven carriage, a Geneva movement. The '787 specification shows the drive means as including a hold and stop gripper to engage the gondola, while Fata uses front and back levers to grip and engage the gondola. In addition, the '787 specification shows, and Fata uses, a plurality of limit switches and a programmable controller in the drive means. The court found that the structures shown in the '787 patent and those of the Fata system were the same or equivalent, in that the only difference was Fata's use of a lever with front and back levers instead of a hold and stop. Fata disputes the conclusion that this difference is insubstantial. At the trial witnesses testified that the two levers combine basic features of a latch and stop, are interchangeable, and operate in the same way. The district court's finding that this is not a substantial difference is not clearly erroneous, and is affirmed.

[4] Fata states that its drive system has features in addition to those shown in the '787 patent, pointing out that in addition to a shock absorbing stop as shown in the '787 patent, it uses an electronic valve that slows the engagement to a controlled stop. Also, Fata states that its gripper permits reversal of the direction of the gondolas, and that Fata also includes another gripper that serves to stabilize the gondolas. The district court correctly ruled out that when all of the claimed features are present in the accused system, the amount of additional features does not avoid infringement. See *Northern Telecom*, 908 F.2d at 5, 15 USPQ2d at 1332 ("The addition of features does not avoid infringement, if all the elements of the patent claims have been met."); *Texas Instruments*, 805 F.2d at 231 USPQ at 839 ("As a matter of law,

subsequent improvements do not in themselves preclude a finding of infringement.")

4.

Fata also argues that the district court attributed excessive scope to the claims, and points to the following statement in the court's opinion as showing this error: "The infringement analysis is based on the scope of the claim-in-issue as a measure of the invention and is not confined to the particular mode of use or preferred embodiment described in the specification." We discern no error in the district court's statement of the law. This court has often explained that the claims are construed in light of the specification, and are not limited to a designated "preferred embodiment" unless that embodiment is in fact the entire invention presented by the patentee. See *Texas Instruments*, 805 F.2d at 1563, 231 USPQ at 835 ("This court has cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.") When the claims include means-plus-function terms in accordance with § 112 ¶ 6, claim scope necessarily is not limited to the preferred embodiments, but includes equivalents thereof. The district court correctly stated, and applied, the law of claim construction.

### Conclusion

The district court's claim construction is confirmed. On this construction the court's finding of infringement is not clearly erroneous, as has been discussed in connection with the claim construction, and is affirmed.

## III

### DAMAGES

The district court's determination of the amount of damages is a question of fact that is reviewed for clear error, while the method used by a district court in reaching that determination is reviewed for an abuse of discretion. *Cybor*, 138 F.3d at 1461, 46 USPQ2d at 1179. The patentee bears the burden of proving its damages by a preponderance of the evidence. See *Heberi v. Lisle Corp.*, 99 F.3d 1109, 1119, 40 USPQ2d 1611, 1618 (Fed. Cir. 1996).

The district court announced from the bench on May 21, 1999, that it had decided li-

ability in favor of Vulcan. On July 28, 1999, before the damages phase, Vulcan and General Motors entered into an agreement in which Vulcan promised not to sue General Motors for its "prior, present and future use, sale, and offer to sell or other disposition" of line 1, which had been completed by Fata and installed at General Motors' Saginaw plant in November 1998. The agreement also granted General Motors a "limited license to have made by FATA, use, sell and offer to sell or otherwise dispose of the four remaining casting lines to be supplied for the Saginaw facility by FATA." The agreement provided that the "license to GM specifically authorizes FATA to supply to and install these four remaining casting lines at the GM Saginaw facility." Paragraph 4 of the Agreement further provided as follows:

4. This Agreement does not waive, release, compromise or discharge any claim that Vulcan may have against Fata with respect to the first casting line delivered by Fata to the GM Saginaw, Michigan facility or any claim Vulcan may have against Fata for Vulcan failing to obtain the business of supplying the five casting lines for the GM Saginaw facility.

In the district court Vulcan sought damages from Fata for lines 1 through 5, stating that ¶ 4 preserved Vulcan's right to full damages for infringement. The district court awarded Vulcan its lost profits for line 1, and held that no damages had been proven as to lines 2 through 5.

### Line 1 Damages

For line 1, Fata does not appeal the award of lost profits as measured by the district court. Vulcan states that the accounting of lost profits should have taken account of the price erosion whereby Vulcan was obliged to lower its bid in view of Fata's infringing bid. The district court calculated Vulcan's lost profits from Vulcan's reduced bid, explaining that Vulcan did not know that Fata had offered an infringing system at the time that Vulcan presented its bid.

[4] For price erosion damages the patentee must show that, but for the infringement, it would have been able to charge and receive a higher price. See *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065, 219 USPQ 670, 675 (Fed. Cir. 1983). It is not required that the patentee knew that the competing system in-

fringed the patent, if the patentee reduced its price to meet the infringer's competition. *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1580, 24 USPQ2d 1401, 1419 (Fed. Cir. 1992) (price erosion losses, when reasonably related to the infringing activity, may accrue before the infringement has been verified or proved in court). See generally *Kalman v. Berlyn Corp.*, 914 F.2d 1473, 1485, 16 USPQ2d 1093, 1102 (Fed. Cir. 1990); *Lam*, 718 F.2d at 1067, 219 USPQ at 676. Thus price erosion damages do not require that Vulcan knew, at the time of its bid, that Fata's competing bid was for an infringing system. However, Vulcan must establish the amount of price reduction, and that the price was reduced in response to the competing bid. The district court made no findings on these aspects.<sup>2</sup> We remand for determination of whether Vulcan established facts supporting its position that but for the infringement it would have obtained a higher price, and if so, the reassessment of damages for line 1.

#### Lines 2 through 5

The district court held that Vulcan's license agreement with General Motors bars Vulcan from obtaining damages based on lost profits or a royalty arising from Fata's sale of lines 2 through 5. The court held that Vulcan's re-

<sup>2</sup> The dissent, while agreeing that it would be impermissible for the district court to have required Vulcan to show that it knew Fata offered an infringing system to establish price erosion damages, contests whether the district court made findings that would preclude the award of such damages on remand. The district court found that "There is no evidence in the record to support Stewart's assumption that Vulcan computed its bid in response to Fata's . . . bid for an infringing system," holding that such evidence is necessary to support a claim for price erosion. There was however evidence that Vulcan computed its bid in response to Fata's competition. For example, Bruce McMellon, president of Vulcan, testified:

Between March and July 1997 Vulcan learned that Fata was a serious competitor for the lost foam casting lines. Because of this competition, Vulcan lowered its markup for the July 1997 rebid to General Motors below the markup included in the March 1997 bid and below the level which would have allowed Vulcan to realize the profit margin in the Massena bids which GM had accepted. . . . Without the competition from Fata, Vulcan would not have lowered its price to General Motors below a price which would have allowed Vulcan to realize the accepted Massena bid profit margin.

The fact of price erosion does not depend on whether Vulcan knew, at the time, that the Fata system was infringing.

served right to damages for "failing to obtain the business" led to no award because such damages had not been proved with sufficient certainty. Thus although the court found that Fata's bids for lines 2 through 5 constituted infringing offers of sale during the period before Vulcan's license to General Motors, no damages were proven. Vulcan argues that damages for lines 2 through 5 should be determined in the same way as for line 1; that is, Vulcan's lost profits on these infringing sales.

The district court ruled that Vulcan, by paragraph 4 of its license agreement with General Motors, had reserved a right to damages only for "failing to obtain the business of supplying" lines 2 through 5. The court declined to view this reservation as entitling Vulcan to full damages from Fata, Vulcan having licensed General Motors "to have made by FATA, use, sell, and offer to sell" the remaining lines to be supplied by Fata. The court held that "failing to obtain the business" related only to Fata's offer of sale, but not its actual sale, which the district court apparently deemed licensed through the General Motors' agreement. Thus the district court held that Vulcan was required to prove its damages for "failing to obtain the business," held that Vulcan "had not proven the amount with any degree of certainty," and awarded none.

[5] We conclude that Vulcan was not entitled to damages for lines 2 through 5 in view of its license to General Motors. Vulcan's grant of an express license "to have [lines 2-5] made by FATA" is not consistent with the assertion of damages against Fata for infringement by lines 2 through 5. Cf. *Cyrix Corp. v. Intel Corp.*, 77 F.3d 1381, 1387-88, 37 USPQ2d 1884, 1888-90 (Fed. Cir. 1996) (finding no infringement when licensee acted within scope of its "have made" rights). On this ground, we affirm the district court's decision to award no damages for lines 2 through 5.

#### Enhanced Damages

Vulcan appeals the district court's finding that Fata's infringement was not "willful" and thus not subject to enhancement of the damages award. Willfulness is a question of fact and is reviewed under the clearly erroneous standard. See *Rite-Hite Corp. v. Kelley Co. Inc.*, 819 F.2d 1120, 1126, 2 USPQ2d 1915, 1919 (Fed. Cir. 1987).

ived rights to damages for "failing to obtain business" led to no award because such damages had not been proved with sufficient certainty. Thus although the court found that Fata's bids for lines 2 through 5 constituted infringing offers of sale during the period before Vulcan's license to General Motors, no damages were proven. Vulcan argues that damages for lines 2 through 5 should be determined in the same way as for line 1; that is, based on lost profits on these infringing sales. The district court ruled that Vulcan, by paragraph 4 of its license agreement with General Motors, had reserved a right to damages only for "failing to obtain the business of supplying" lines 2 through 5. The court declined to view this reservation as entitling Vulcan to full damages from Fata, Vulcan having licensed General Motors "to have made by FATA, use, sell, and offer to sell" the remaining lines to be supplied by Fata. The court held that "failing to obtain the business" related only to Fata's offer of sale, but not its actual sale, which the district court apparently deemed licensed through the General Motors' agreement. Thus the district court held that Vulcan was required to prove its damages for "failing to obtain the business," and that Vulcan "had not proven the amount of any damage of certainty," and awarded none.

[5] We conclude that Vulcan was not entitled to damages for lines 2 through 5 in view of its license to General Motors. Vulcan's claim of an express license "to have [lines] made by FATA" is not consistent with the award of damages against Fata for infringement by lines 2 through 5. Cf. *Cyrix Corp. v. Rite-Hite Corp.*, 77 F.3d 1381, 1387-88, 37 USPQ2d 1884, 1888-90 (Fed. Cir. 1996) (holding no infringement when licensee acted within scope of its "have made" rights). On this ground, we affirm the district court's decision to award no damages for lines 2 through

#### *balanced Damages*

Vulcan appeals the district court's finding that Fata's infringement was not "willful" and thus not subject to enhancement of the damages award. Willfulness is a question of fact, to be reviewed under the clearly erroneous standard. See *Rite-Hite Corp. v. Kelley Co.*, 819 F.2d 1120, 1126, 2 USPQ2d 1915, 19 (Fed. Cir. 1987).

The rules of patent infringement are rules of business ethics, and require prudent commercial actions in accordance with law. See *SRI Int'l, Inc. v. Advanced Tech. Labs., Inc.*, 127 F.3d 1462, 1465, 44 USPQ2d 1422, 1424 (Fed. Cir. 1997). 35 U.S.C. § 284 provides remedy to the patentee when these standards are not met, up to three times the amount of damages found or assessed damages.

The tort of willful infringement arises upon deliberate disregard for the property rights of the patentee. Thus the focus is generally on whether the infringer exercised due care to avoid infringement, usually by seeking the advice of competent and objective counsel, and receiving exculpatory advice. When it is found that the infringer acted without a reasonable belief that its actions would avoid infringement, the patentee has established willful infringement, which may be accompanied by enhanced damages. See *Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1346, 57 USPQ2d 1953, 1957 (Fed. Cir. 2001). Such entitlement is not absolute, however, and reasonable discretion reposes in the district court, on consideration of all of the circumstances. See *SRI*, 127 F.3d at 1468-69, 44 USPQ2d at 1427.

The district court found that Fata met its duty to exercise due care by seeking legal advice from a reputable law firm in the United States after receiving notice of possible infringement by way of General Motors on or about August 13, 1997. The court found that Fata relied in good faith on the attorney's advice that the '787 patent was either invalid or did not cover the system proposed by Fata, based on written opinions received on September 12, 1997 and December 18, 1997. Vulcan argues that Fata had already submitted its infringing offer to General Motors before it sought the advice of United States counsel, and that evidence at trial showed that Fata had knowledge of the '787 patent as early as 1993, and that there was a communication between company executives before Fata submitted its bid. Thus Vulcan argues that Fata knew that a lost foam casting system meeting the General Motors specifications would or could reasonably infringe Vulcan's patent, and that Fata took no steps to obtain the advice of counsel until it was notified of infringement.

[6] Although we view the question as close, Vulcan has not shown clear error in the district court's finding that Fata's infringement

was not willful, or that the court abused its discretion in declining to enhance damages. Although Fata did not show that it obtained legal advice before submitting its bid, it acted promptly upon receiving notice of infringement, at a time when its bid had been accepted but no other infringing activity was shown. We note the thoroughness with which the district court explored the issue, and on this close question give deferential weight to that court's evaluation of the evidence.

The district court also rejected Vulcan's assertion that this was an exceptional case, and denied the requested attorney fees. We do not intrude upon the district court's exercise of discretion on this issue.

#### IV

#### *THE REQUESTED NEW TRIAL*

Fata moved for a new trial pursuant to Fed. R. Civ. P. 59, stating that it wished to introduce additional prior art with respect to patent validity. A district court's denial of a new trial based on assertedly newly discovered evidence is reviewed for abuse of discretion. See *Good v. Ohio Edison Co.*, 149 F.3d 413, 423 (6th Cir. 1998). We apply Sixth Circuit law to this procedural aspect, taking note that this standard appears to be common to all circuits. See generally *National Presto Indus., Inc. v. West Bend Co.*, 76 F.3d 1185, 1188, 37 USPQ2d 1685, 1686 (Fed. Cir. 1996) (applying regional circuit law to procedural matters that are not unique to patent cases).

Fata filed this motion seven months after the liability trial had closed and two months after the court's announcement of its decision on validity. Final judgment had not been entered, for the damages phase had not been completed. Fata argues that it satisfied the requirements of Rule 59(b), which states that a motion for a new trial "shall be filed no later than 10 days after entry of the judgment." However, whether or not Fata's motion was untimely under Rule 59, the district court did not abuse its discretion in declining to grant a new trial.

Fata's motion cited several patents on a green sand casting system, all of which were issued before 1975. Fata states that it did not offer this evidence during the trial because it could not foresee how the court would interpret the patent. Fata does not explain how this purported uncertainty lulled it into avoiding

this body of references. A party must present its evidence at the trial, absent some extraordinary development or unwarranted surprise, by a party or the court, whereby justice requires redoing the trial. The green sand casting system was before the court and the parties during the trial, and the now-offered patents were readily available public information. The district court's ruling that Fata had not presented justification for their belated presentation is well supported. The denial of a new trial is affirmed.

#### SUMMARY

We affirm the district court's ruling that the '787 patent is valid and infringed. We affirm the district court's award of lost profits for line 1, modified in that Vulcan may attempt to establish, on remand, entitlement to additional price erosion damages for line 1. The district court's denial of damages for lines 2 through 5 is affirmed, as is the denial of attorney fees, enhanced damages, and a new trial.

Each party shall bear its costs.

#### AFFIRMED; DAMAGES MODIFIED; REMANDED

Michel, J., dissenting in part.

I respectfully dissent from two of our damages rulings today.

##### I.

First, contrary to the majority's opinion, the district court most assuredly made factual findings concerning price erosion:

[Vulcan's expert witness] Stewart assumed that had [the accused infringer] Fata not bid, Vulcan could have obtained the General Motors business at a higher price and therefore should be compensated for the erosion of its prices caused by Fata's infringement. *There is no evidence in the record to support Stewart's [i.e., Vulcan's] assumption that Vulcan computed its bid in response to Fata.* Vulcan did not know Fata was bidding an infringing system. \*\*\* Vulcan lost the bid to Fata because its bid was almost a third higher. *There is no credible evidence to support Vulcan's assertion that its bid price to General Motors was shaped to respond to a bid for an infringing system.* *There is no credible evidence to support a claim for price erosion.*

(J.A. 58.24 – 58.25) (emphasis added). In other words, the district court found that Vulcan had failed to satisfy its burden of showing that, indeed, Vulcan had "computed [or shaped] its bid in response to Fata."

I agree that portions of the above-quoted language could suggest that the district court may have inadvertently (and impermissibly) required Vulcan to also show that it knew Fata was bidding with an infringing system, though that does not seem immediately clear to me either. Regardless, even assuming the district court did require this showing, that requirement would amount to nothing more than harmless error, *see Fed. R. Civ. P. 61*, given again that no "credible evidence" shows that Vulcan had in any event shaped its bid to GM in response to Fata's competing bid. In my view, then, it would seem a waste of judicial resources, not to mention client fees, to remand this particular issue to the district court so the court, again, could simply reiterate what it had said before; that no "credible evidence" supports a claim that Vulcan had shaped its bid in response to Fata's.

The majority cites to testimony from Vulcan's president, Bruce McMellan, suggesting that this testimony further justifies its decision to remand on this price-erosion point. But again, the district court apparently rejected this evidence as "incredible," a fair assumption given that the testimony came from a witness as putatively biased as the president of Plaintiff Vulcan itself. Moreover, Vulcan itself does not decry the district court's findings in this regard as insufficient or "clearly erroneous," *see Fed. R. Civ. P. 52(a)*, the high standard it would have to meet in order to obtain a reversal on a factual determination. And yet, the majority appears to do just that, noting that some evidence, e.g., McMellan's testimony, supports Vulcan's price-erosion claim and, at the same time, narrowly reading the district court's opinion so that it squarely "hold[s]" that Vulcan had to know that the system Fata was offering was an infringing system. I do not read the district court's opinion so narrowly, and would not substitute my view of the evidence for the facts found by the district court, especially since Vulcan itself does not challenge these factual findings as clearly erroneous.

##### II.

Second, however, I do believe the district court and the majority have erred by deter-

v. 58.24 – 58.25) (emphasis added). In other words, the district court found that Vulcan had failed to satisfy its burden of showing — indeed, Vulcan had “computed [or ped] its bid in response to Fata.”

I agree that portions of the above-quoted language could suggest that the district court have inadvertently (and impermissibly) tired Vulcan to also show that it knew Fata bidding with an infringing system, though does not seem immediately clear to me either. Regardless, even assuming the district court did require this showing, that requirement would amount to nothing more than needless error. *see Fed. R. Civ. P. 61*, given that no “credible evidence” shows that Vulcan had in any event shaped its bid to GM’s response to Fata’s competing bid. In my view, then, it would seem a waste of judicial resources, not to mention client fees, to re-litigate this particular issue to the district court. The court, again, could simply reiterate what it had said before; that no “credible evidence” supports a claim that Vulcan had shaped its bid in response to Fata’s.

The majority cites to testimony from Vulcan’s president, Bruce McMellon, suggesting this testimony further justifies its decision to stand on this price-erosion point. But the district court assumedly rejected this evidence as “incredible,” a fair assumption given that the testimony came from a witness putatively biased as the president of the company itself. Moreover, Vulcan itself did not decry the district court’s findings in regard as insufficient or “clearly erroneous.” *see Fed. R. Civ. P. 52(a)*, the high standard it would have to meet in order to obtain reversal on a factual determination. And yet, the majority appears to do just that, noting some evidence, e.g., McMellon’s testimony, supports Vulcan’s price-erosion claim at the same time, narrowly reading the court’s opinion so that it squarely “[s]tands” that Vulcan had to know that the Fata was offering was an infringing system. I do not read the district court’s opinion narrowly, and would not substitute my own of the evidence for the facts found by the court, especially since Vulcan itself did not challenge these factual findings as erroneous.

## II.

And, however, I do believe the district court and the majority have erred by deter-

mining that the license agreement between Vulcan and GM — a nonparty — precluded Vulcan from recovering damages from Fata for infringing lines 2 – 5. As I understand it, the district court’s decision in this regard actually rested on two reasons: first, that allowing Vulcan to benefit from both the license agreement it had with GM and from the damages that Vulcan tried to recover for these infringing lines would constitute a double recovery or “windfall”; and second, that damages for infringing “offers to sell” under 35 U.S.C. § 271 and damages for actual sales “qualitatively” differ, meaning the evidence needed to prove an entitlement to each must also differ. Vulcan, reasoned the district court, had simply and mistakenly relied on the same type of evidence to prove damages for the infringing “offers to sell” as it had to prove damages for the completed infringing sale.

Both of these asserted rationales have facial appeal. But on closer scrutiny, neither holds up as applied to the facts of this case. First, the license agreement neither absolves Fata of damages for infringing lines 2 – 5 nor gave Vulcan a “windfall.” It bears emphasizing that the language of the agreement took pains to make clear that Vulcan and the only other party to the agreement (GM) did not in any way intend to foreclose Vulcan’s right to recover damages against Fata:

This [Vulcan-GM] Agreement does not waive, release, compromise or discharge any claim that Vulcan may have against Fata with respect to the first casting line delivered by Fata to the GM Saginaw, Michigan facility or any claim Vulcan may have against Fata for Vulcan failing to obtain the business of supplying the five casting lines for the GM Saginaw facility.

(J.A. 58.15) (emphasis added). By any reasonable interpretation, the language above does not in any way limit the damages that Vulcan could receive for “failing to obtain the business,” i.e., the lost sales for supplying casting lines 2 – 5. Remember, too, that GM and Vulcan had signed this license after the liability phase of the trial but before the damages phase of the trial had begun. So one would hardly expect Vulcan to agree to a contract that would in turn forego its rights to receive the full amount of damages that otherwise seemed destined to come its way. After all, the district court indicated in May 1999, i.e., before GM and Vulcan signed this license agree-

ment, that it had already found Fata liable for infringing all nine casting lines.

Further, nothing in the license contract suggests that any party besides GM and Vulcan had rights under it. Thus, we can hardly say that Vulcan had licensed or “permitted” Fata to do anything without incurring damages for it; to the contrary, the license merely gave GM the right to timely *receive* these four infringing lines without having Vulcan stand in the way, e.g., by seeking an injunction enjoining Fata’s delivery of these lines. And neither party suggests that Fata somehow qualified as a third-party beneficiary to this license agreement, notwithstanding the clear language used to preserve Vulcan’s right to recover damages against Fata.

The district court’s reasoning about Vulcan receiving a “windfall” also does not persuade me. Again, the license agreement was between GM and Vulcan, not Vulcan and Fata. And GM and Vulcan each received valuable consideration under their bargain, thereby making their agreement a binding one. For its part, GM received the right to have Fata provide the four infringing systems that Fata had already finished manufacturing without Vulcan exercising its right to thwart Fata’s delivery. In other words, GM received assurances that Vulcan would not deter the *timely* delivery of the systems that Fata was ready to produce by seeking, e.g., an injunction that would prohibit this delivery. (As Vulcan’s counsel indicated at oral argument, Vulcan did not have any ready-made casting lines that it could immediately deliver in Fata’s stead, at least not for the infringing lines 2 – 5.)

In exchange, GM gave Vulcan the right to some of the “business” it had otherwise lost — the business of providing the other lines (lines 6 – 9) that Fata had not yet made (and that GM, presumably, did not immediately need), along with opportunities to bid on other GM contracts. This consideration does not amount to a “windfall”; it simply constitutes the consideration that GM gave in exchange for Vulcan forfeiting its right to seek relief that would enjoin the delivery of lines 2 – 5. Vulcan never received any damages (or any other remedy, for that matter) for the four acts of infringement relating to lines 2 – 5. Put differently, Vulcan received nothing to make it “whole” for profits lost to Fata as a result of the four infringing devices that GM accepted,

contrary to the very purpose of awarding damages in the first place.

Last, the district court should have considered the evidence that Vulcan used to prove damages for the four infringing "offers to sell," even though Vulcan presented the same type of evidence for these "offers to sell" as it did for the completed sale of an infringing line. In this case, GM could have lawfully offered the Saginaw agreement (including lines 2 - 5) to Vulcan only. This is so because GM's contract specifications set forth the exact requirements that Vulcan's '787 patent already covered. In addition, GM approached only two companies about providing the nine casting lines that it needed for its Saginaw foundry — Vulcan and Fata. And only two companies thereafter sought this business with GM — Vulcan and Fata. So unless GM suddenly changed its contract specifications and opened up the bidding to other companies or unless Vulcan simply decided not to enforce its patent rights at all, no one besides Vulcan [one of only two parties approached by GM] could have supplied all the requested casting lines. (The record, by the way, does not bear out any of these hypothetical situations.)

In these circumstances, then, Vulcan correctly asserts that a "but for" test should determine the damages it can recover for an infringing offer for sale, given again that only two suppliers (Vulcan and Fata) competed in the relevant market:

The question to be asked [is] primarily: had the Infringer not infringed, what would Patent Holder \*\*\* have made? *In determining such damages, the profits lost by the patent owner in a two-supplier market is a proper ground for granting relief. Lost profits may be in the form of diverted sales, eroded prices, or increased expenses. The patent holder must establish a causation between his lost profits and the infringement. A factual basis for the causation is that 'but for' the infringement, the patent owner would have made the sales that the infringer made, charged higher prices, or incurred lower expenses.*

*Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1064-65 [219 USPQ 6707] (Fed. Cir. 1983) (quoting *Aro Mfg. Co. v. Convert-Top Replacement Co.*, 377 U.S. 476, 507

[141 USPQ 681] (1964)) (citations omitted) (emphasis added). Applying the "but for" test, therefore, Vulcan would indeed have obtained the GM business: "But for" Fata's four infringing offers, Vulcan — the only party whose patented casting line "read on" to GM's contract specifications — would have received these four contracts to build casting lines 2 - 5. Accordingly, the "offer-to-sell" damages (and the type of evidence needed to show them) here are indeed the same as the damages (and the type of evidence needed to show them) that Vulcan would have received for any other infringing sale, *i.e.*, lost profits resulting from these four lost sales. Again, however, Vulcan received nothing for the loss of these four contracts, in derogation of the principle that damages should make aggrieved parties whole. The benefits that Vulcan received in its license agreement with GM merely constituted the consideration that Vulcan received for giving away its right to obtain another remedy; namely, an injunction against Fata's imminent and infringing delivery of lines 2 - 5.

Nevertheless, the district court failed to more closely construe the plain language of the GM-Vulcan license, and it failed to consider that this agreement gave rights to GM only. In addition, the court failed to apply the "but for" test for a two-supplier market. Accordingly, I would vacate and remand this portion of the court's judgment for additional findings about the damages owed to Vulcan for the four infringing offers to sell. The district court could have calculated these damages by examining the same type of evidence that Vulcan had presented for any other completed-but-infringing sale.

### III.

For the reasons stated above, I would affirm the express findings made by the district court about no price erosion. But I would vacate and remand the court's determination about the damages for the infringing offers to sell lines 2 - 5. I therefore respectfully dissent, in part, from the majority's decision.

### Charter Oak Fire Insurance Co. v. Hedeon & Cos.

U.S. Court of Appeals  
Seventh Circuit

Nos. 00-3487, 00-3627

Decided February 4, 2002

### TRADEMARKS AND UNFAIR TRADE PRACTICES

#### [1] Infringement; conflicts between manufacturers — In general (§ 335.01)

Unfair and false advertising — In general (§ 390.01)

Insurer had duty to defend insured party accused of trademark infringement under terms of liability policy that covers insurer against liability for "advertising injury," even though there is no direct reference to "trademark infringement" in policy, since policy refers to infringement of "title," which is broad enough to encompass claims of trademark infringement, and since trademark claimant's alleged injury was arguably committed by insureds in course of advertising, in that infringement complaint alleges use of "Machines" trademark on letterhead in manner that impacted "the commercial public" and resulted in "unlawful profits" for insureds who are involved in business with very limited commercial audience.

#### [2] Infringement; conflicts between manufacturers — In general (§ 335.01)

### REMEDIES

Monetary — Attorneys' fees; costs — In general (§ 510.0901)

Insured party may recover damages that naturally flow from insurer's breach of duty to defend, including all costs and attorneys' fees incurred by insured party in defending suit, provided at least one theory of liability in complaint appears to be covered by insurance policy; in present case, federal district court did not abuse its discretion in determining amount of attorneys' fees incurred by insured parties for defense of trademark infringement suit against them, even though insurer was restricted to certain amounts billed to insured since insurer declined to defend insured parties and thus could not be involved in litigation.